

EVALUATION OF THE SHORELINE LANDOWNER EDUCATION PROGRAM

Conducted Spring 2005

Puget Sound Action Team

Background

Since more than 80 percent of the Puget Sound shoreline is privately owned, shoreline landowners are essential partners in the work to preserve, protect and restore Puget Sound. Between 2001 and 2005, the Puget Sound Action Team has worked with a variety of agencies and organizations to educate shoreline landowners in Whatcom, King, Kitsap, Jefferson, Pierce, and Mason and Clallam counties. Education took the form of workshops, beach walks, and field trips. Some communities provided follow-up assistance for landowners who wanted help to implement the landscaping, erosion control and other management practices promoted in the workshops.

Purpose of the Program

The purpose of the program is to educate landowners about their shorelines and give them information and resources to help them manage their property in ways that minimize harm to Puget Sound. Key messages include:

- Puget Sound and its web of life are in trouble.
- Human impacts to marine shorelines are a major contributing factor to declining health.
- Shorelines are largely in private hands and it will take the collective efforts of landowners to bring about positive change.
- Landowners can do simple and practical actions to improve conditions for the Sounds web of life.
- These actions may also save money and enhance the value of their property.

The education covers water quality, septic repair and maintenance, shoreline vegetation and landscape practices, stormwater drainage and management, stewardship tools and resources, land conservation options and incentives, regulatory and permitting issues, and case studies of restoration projects. Presenters included shoreline geologists, marine biologists, shoreline planners, consultants, resource agencies and organizations. A more detailed description of the shoreline landowner education program is provided in a paper produced by the Puget Sound Action Team, (Taylor, et. al).

Evaluation Method

In the spring of 2005, the Action Team compiled survey responses from 40 phone interviews and 43 online surveys from people who attended workshops. The Action Team used Survey Monkey, www.surveymonkey.com to conduct the online surveys and staff conducted all but one of the phone interviews (the Hood Canal Coordinating Council educator did one interview.) The low number of survey responses from Port Hadlock and Port Townsend were likely due to the span of time between workshops held in 2001 and the

survey. Some people did not remember the event well. All Jefferson County surveys were limited to phone interviews because e-mail addresses were not available for workshop participants.

The following table summarizes the workshop responses for each workshop.

Workshop	# Attendees	# Survey Responses	% Responses of Attendees
Bainbridge Island	45	21	45.7%
Birch Bay	54	11	20.4%
Chuckanut/Edgewood	26	11	42.3%
North Shore Hood Canal	165	10	6.1%
Port Hadlock	64	8	12.5%
Port Townsend	50	4	8.0%
Silverdale	146	18	12.3%
TOTALS	551	83	

Evaluation Questions

The Action Team developed the survey and interview to answer the following questions:

- What motivated landowners to attend the workshop?
- Did landowners adopt specific behaviors promoted in the workshop?
- Did landowners intend to adopt behaviors in the future?
- Which behavior(s) were easiest to adopt?
- Which behaviors were difficult to adopt and why were they difficult?
- Did landowners become involved with shoreline preservation, restoration or volunteer work as a result of the workshop?
- Did they contact any of the resources provided at the workshop?
- Did they share information with others? If so, how?
- What can workshop organizers do to improve the workshops?

Key Findings

Summary of Behaviors Adopted	Type and # of Respondents	Percent Response
Landscaping (general)	All shoreline landowners (72)	73.6%
Retain or plant native vegetation	All shoreline landowners (67)	79.1%
Pruning	People who prune (40)	60.0%
Use of yard chemicals	All shoreline landowners (70)	54.3%
Septic system care	Shoreline landowners with septic systems (48)	43.7%
Bluff maintenance	Shoreline landowners on bluffs (28)	57.1%
Attitude change for shoreline erosion (of those concerned with erosion)	Shoreline landowners concerned about erosion (11)	90.9%
Stormwater management	All shoreline landowners (71)	23.9%

Summary of Findings

- Almost 92% of the people surveyed were shoreline landowners, showing that efforts to reach this audience were successful.

- Shoreline landowners improved their stewardship of over 9000 feet of shoreline as a result of the workshop.
- Landowners frequently said that the education reinforced and re-affirmed behaviors that they were already doing or were planning to do. The workshops provided information and resources that enhanced their activities and helped them carry out their plans.
- People frequently answered that they had already changed their use of yard chemicals.
- Of all the behaviors encouraged by the workshop, only 23.9% were motivated to change the way they manage stormwater. In phone interviews people frequently stated that stormwater was not a problem for them. The people who were experiencing problems with stormwater were most concerned.
- With the exception of some communities where onsite septic systems have been publicized as causing problems (Hood Canal), the workshop did not motivate most people (43.7%) to change the way they care for their septic systems. During phone interviews people said their system was working fine, it was new, or they already knew what to do before the workshop.
- Information about the damaging impacts of bulkheads and more natural shoreline protection methods was new information for many people. People felt motivated to share this information with others. Of people who live on bluffs and who are worried about erosion, over 90% said that the workshop changed their attitude about how to manage shoreline erosion.
- Almost 74% of the shoreline landowners indicated that the workshop influenced the way they landscape their property. This number is likely low, since 79% indicated that the workshop influenced them to retain or plant native vegetation.
- Over 90% of respondents shared information with other people. Sharing information with other people was motivation for some people to attend the workshop.
- Most people's involvement with protection, preservation, or restoration of shorelines took the form of volunteer work. Organizations they work with include: Beach Watchers, Water Watchers, Bay Watchers (these were mentioned most often by Jefferson County respondents). Hood Canal Coordinating Council, People for Puget Sound, Nooksack Salmon Enhancement, Drayton Harbor Shellfish Protection Committee, and Portage Bay Shellfish Protection Committee. Some people mentioned that they learned about the workshop from these organizations.

- Five people are working closely with community groups to protect their shorelines and educate others in the community: Birch Bay Steering Committee, Manchester Community Council, local Rotary club.
- People offered many suggestions to improve education and assistance for shoreline landowners. They often recommended other ways to provide information to landowners (Web site, information packets, neighbor to neighbor education) and more specialized guidance for shoreline development, regulations, and stormwater.

SURVEY RESPONSES

Comment sections: Interviewer comments are in regular type. Respondent comments are in italics and comments by different individuals are separated by slashes (/).

1. Do you own shoreline property?	Response	Percent Response
	76	91.6%
	7	8.4%
Total Respondents:	83	
Skipped this question:	0	

1. Comments:

“No” respondents skipped to question 19.

2. Where is your shoreline property located?	Locations
Kitsap	Liberty Bay, Rich Passage, Kingston, Hood Canal, Oyster Bay, Olalla, Little Anderson Creek, Seabeck, Driftwood Cove, Bainbridge Island
Jefferson	Discovery Bay, Marrowstone Island, Port Townsend, Port Ludlow, Admiralty Inlet
Mason	North Shore Hood Canal, Big Bend Hood Canal, Belfair
Whatcom	Birch Bay, Chuckanut Bay
Total respondents	76
*Skipped this question	7

2. Comments:

Open-ended question. Some answers were not identified to county and/or easily recognizable features and so were not included.

3. How many feet of property along the shoreline do you own?	Responses	Percent Response
Less than 70 feet	14	20.3%
71 - 100 feet	26	37.7%
101 – 200 feet	15	21.7%
Over 200 feet	14	20.3%
Total respondents	69	
Skipped this question	14	

3. Comments:

The cumulative total of waterfront claimed by respondents was 9,692 feet. This includes some double counting because a few people shared shoreline property through their condominium associations. On the other hand, some people did not know how much waterfront they owned and did not answer the question.

4. How much property do you own?	Responses	Percent Response
Less than one acre	42	56.8%
1 acre	10	13.5%
1 - 5 acres	19	25.7%
More than 5 acres	3	4.0%
Total respondents	74	
Skipped this question	9	

5. Is there a house on your property?	Response	Percent Response
Yes	71	94.7%
No	4	5.3%
Total respondents	75	
Skipped this question	9	

6. Do you live there full time or part time?	Response	Percent Response
Full time	47	70.1%
Part time	20	29.9%
Total respondents	67	
Skipped this question	16	

7. Why did you attend the workshop?	Response	Percent Response
To be a good steward	33	39.3%
Concerns about erosion/stormwater	14	16.7%
Learn rules & regulations/development plans	13	15.5%
Learn about Puget Sound/issues/community	13	15.5%
To share information with others	7	8.3%
New in the community	3	3.6%
Other answers	1	1.2%
Total responses given	84	
Total respondents	73	
Skipped this question	10	

7. Comments:

Open-ended question. Respondents gave more than one answer. Answers were grouped into the categories shown.

8. Did the workshop influence the way you landscape your property?	Response	Percent Response
*Yes	53	73.6
No	19	26.4
Total respondents	72	
Skipped this question	11	

8. Comments:

*People commented that the workshop reinforced, reaffirmed, and/or provided more complete information for behavior they were already doing. The interviewer counted these answers as “yes” during phone interviews. People who took the electronic survey may not have answered “yes” when they were already doing these behaviors before they attended the workshop.

Of the “no” respondents, 5 answered that the workshops influenced their future landscaping plans. Their plans include: *I plan to build a rain garden./Leave the trees and vegetation alone!/Use fewer chemicals./The workshop did not influence the way we landscape now because we have no yard. If we move, we will use organic fertilizer, native plants, etc.*

8a. How did the workshop influence the way you landscape?	Response	Percent Response
Leave natural/native plants/choice of plants	38	56.7%
Avoid/reduce/changed yard chemicals	13	19.4%
Manage stormwater better	5	7.5%
Use driftwood logs to buffer shoreline	3	4.5%
Improved septic system/care	3	4.5%
Other	5	7.5%
Total responses	67	
Total respondents	53	
Skipped this question	30	

8a. Comments:

Open-ended question. Respondents able to give more than one answer. Responses were grouped into the categories above.

“Other” answers for 8a:

Careful about set backs and other rules./Removed invasives./Stopped dumping yard waste over the bank./Hood Canal Coordinating Council obtained grant funds for the removal of a salt water pool./I had high motivation anyway, but it was extremely helpful to know that resources existed for getting information, and that government entities actually cared and want to encourage good practices./Removed batteries, creosote logs, trash.

9. Do you cut trees and shrubs to retain your view of the water?	Response	Percent Response
Yes	30	43.5%
No	39	56.5%
Total responses	69	
Skipped this question	14	

9. Comments:

The phone interviewer had the impression that people were uneasy answering this question. Some people started out answering “no” and then disclosed that they do cut, but were careful not to cut too much.

9a. Has the workshop influenced the way you prune?	Response	Percent Response
Yes (now)	24	60.0%
No	16	40.0%
Total responses	40	
Skipped this question	43	

9a. Comments:

Eleven people who answered “no” answered that the workshop influenced the way they intend to prune in the future.

When asked how the workshop influenced their pruning, people commented:

Our cutting and pruning was limited to an area 100 feet back from the shoreline and along the pathway to the beach./We are more aware of trimming and not killing trees or removing plants that aren't a danger to bank loss or other property. We use an arborist to trim out trees./The only shrubs I prune are scotch broom but the workshop encouraged me to start working on a plan for more extensive restoration of the area with the scotch broom./We leave the plants themselves and prune less severely./Minimal trimming./I'm pruning less aggressively./Alders below the bank are trimmed into bushes, not leveled./Keep in mind shoreline preservation./Plan for better replacements./Trim rather than cut./Made me more aware of bird, insect, and fish food connections along the shoreline. I was unlikely to prune much anyway, but am now even more unlikely to do so and will plant more shrubs along the shoreline./We work with NSEA to educate stream-side dwellers and assist in improving salmon habitat./We intend to leave our property natural./ I have no trees in the view area./We are creating view corridors in the trees and bushes without topping them./We are consulting an expert as to how to handle the slope most effectively./Basic pruning to maintain accessibility to the beach and provide a natural but not overgrown effect./To keep the slope stable I will plant more natives and prune less.

One comment to note: *We have removed all the trees and shrubs that require annual pruning and will replace them with trees and shrubs that will not require any pruning.*

10. Did the workshop influence you to retain or plant native vegetation on your property?	Response	Percent Response
Yes	53	79.1%
No	14	20.9%
Total respondents	67	
Skipped this question	16	

10. Comments:

Five people answered that they intend to plant native vegetation in the future.

11. Did the workshop provide adequate information and resources to help you use native plants in your landscape?	Response	Percent Response
Yes	51	86.4%
No	8	13.6%
Total respondents	59	
Skipped this question	24	

12. Did the workshop influence the amount and/or type of pesticides, herbicides, and fertilizers that you use?	Response	Percent Response
Yes	38	54.3%
No	32	45.7%
Total respondents	70	
Skipped this question	13	

12. Comments:

“No” respondents were asked whether the workshop influenced their future use of yard chemicals. One person responded “yes”. During phone interviews, many people indicated that they had already stopped or reduced the use of yard chemicals before the workshop, but the workshop reaffirmed their decision. People who responded “yes” were asked to describe how they’ve changed their use of chemicals. They responded:

I discourage my husband from using any fertilizer at all for fear it will end up in the water./The good news is that we hardly use any of these items, the bad news is that it shows./Made me feel better about all the weeds in the lawn./I have never used herbicides./I have not used any chemicals since the workshop, choosing instead to use alternative methods of weed control./No longer use weed & feed. Trim weeds instead of herbicides; encourage natives to grow on the bank./We don’t use any of these products; we’re putting up bat boxes, and encouraging the growth of plants and limited use of grass./Despite frowns from our neighbors, we do not fertilize the grass or use pesticides—I also try to talk about why, when appropriate./Still in the planning stages./It reinforced my practices./Being very careful especially around golf course ponds./Very little use./Lessened and changed use of fertilizers.

13. Does your home have a septic system?	Response	Percent Response
Yes	53	73.6%
No	19	2.4%
Total respondents	72	
Skipped this question	11	

13. Comments:

“No” respondents went on to answer question 14.

13a. Did the workshop influence the way you maintain your septic system?	Response	Percent Response
Yes	21	43.7%
No	27	56.3%
Total respondents	48	
Skipped this question	35	

13a. Comments:

When asked to describe the changes they made, people commented:

I attended another seminar with the Health District on septic; we pump more often now; have always been cautious about what goes in the system./I was already keeping the system pumped and tested, but now I plan to actively pursue ways to control the nitrogen./We had it checked by the county and only allow biodegradables to be flushed down./We had it inspected for the first time in the 30 years since we’ve had it and...it passed; also changed to liquid detergents./Get it inspected every 3 years./Reduce the load by changing to a front loading washer and no food disposal./Attention to oils and greases and better maintenance schedule.

14. Is your property on a bluff above the beach?	Response	Percent Response
Yes	29	30.6%
No	43	69.4%
Total respondents	72	
Skipped this question	11	

14. Comments:

“No” respondents went on to question 15.

14a. How high is the bluff above the beach?	Response	Percent Response
0 – 30 feet	9	33.3%
31 – 70 feet	12	44.4%
71 – 100 feet	3	11.1%
101 – 150 feet	3	11.1%
151 – 200 feet	0	0%
Total respondents	27	
Skipped this question	56	

14b. Did the workshop influence how you manage the bluff?	Response	Percent Response
Yes	16	57.1%
No	12	42.9%
Total respondents	28	
Skipped this question	54	

14b. Comments:

“Yes” respondents were asked to describe how they changed the way they manage the bluff:

Let it alone./Did not develop (stairs, bulkhead, remove trees) as planned./Did not build stairs./Planted trees./Worked with neighbors to retain trees, leave stumps in our bank./Prune less often, replanted for erosion control./Tight lined runoff to beach—workshop helped me handle runoff./Helped me understand the impacts of soil saturation, stopped dumping yard waste over the bank./Trim, not cut, trees; native vegetation./Will get expert advice if I do anything, be cautious.

15. Are you concerned about erosion or landslides on your beach?	Response	Percent Response
Yes	33	47.1%
No	37	52.9%
Total respondents	70	
Skipped this question	13	

15. Comments:

“No” respondents went on to question 16.

15a. Is your home or other structure at risk of being damaged from erosion or landslides?	Response	Percent Response
Yes	12	37.5%
No	20	62.5%
Total respondents	32	
Skipped this question	51	

15a. Comments:

Survey asked how they manage erosion or intend to manage erosion. Answers:

Maintain vegetation./Tight line drainage./Use logs to buffer waves./Hired consultant./A bioswale on the top of the bank to prevent edge erosion on the bank./Tight line to base of the bank where velocity is removed and water is dispersed via a perforated cross pipe and rip-rap./Let it remain wild./More plantings of strong rooting, water consuming plants on our bank./Planted snowberries on top; trim alders; encourage natives/bulkhead/collected driftwood logs at base, added plantings to slope./Will secure logs in berm and dig out creek next to property so it can flow year round./Minimal management, some rock/native plants.

15b. Did the workshop change your attitude about how to manage shoreline erosion?	Response	Percent Response
Yes	10	90.9%
No	1	9.1%
Total respondents	11	
Skipped this question		

15b. Comments:

When asked why they attended the workshop (question 7) almost 17% of the people went to the workshop to learn about shoreline erosion and drainage issues. Phone interviews revealed that people were surprised to hear that bulkheads were damaging to the Sound and often unnecessary. Comment from phone interview: *People are lying about the bad effects of bulkheads.*

15c. Would you consider an alternative to traditional methods, such as soft shoreline protection?	Response	Percent Response
Yes		
No		
Total respondents		
Skipped this question		

16. Have you changed the way you handle stormwater as a result of the workshop?	Response	Percent Response
Yes	17	25.9%
No	54	76.1%
Total respondents	71	
Skipped this question	12	

16. Comments:

Survey asked “yes” respondents how they changed the way they managed stormwater:

Used to tight line, trying to infiltrate more, use bioswales. /Redirected a natural spring for irrigation./Reduced impervious surfaces./Tight-lined./I took out an asphalt driveway and built a French drain./Consulted with experts on site drainage./More sensitive to drainage; tight-lined runoff to beach; discussed drainage with neighbor./Cut blackberries and replaced with native; consulted with a geologist./We will ensure that no more impervious surface area is added to our property./I am adding plants to minimize the effect of stormwater./A retaining wall was built so that stormwater will perk through sandy soil./We are putting in a rain barrel for summer irrigation; we have created a wetland area to handle the stormwater flow that comes onto our property./Draining away from the shore; using a tight-line to the beach./Diverting everything possible to other parts of the yard./Get advice to decide to build an additional building.

Two comments stood out: *Replaced lawn with crushed gravel to infiltrate more water./Put culvert on property to direct water to beach.*

17. Of all the things you learned to do in the workshop to protect Puget Sound, which is the easiest?	Response	Percent Response
Native plants/planting for slope stability	22	55.0%
Avoid/reduce/change yard chemicals	15	37.5%
Septic system maintenance	3	7.5%
	40	
Total respondents	52	
Skipped this question	31	

17. Comments: Open-ended question. People were allowed to give more than one answer. The responses were categorized above. Other answers include:

Accumulation of logs to lessen base erosion./Talk with condo association about gardening and car washing practices./Keep doing what I'm already doing—I am a good steward./There is very little we can do because of the bulkhead and no yard.

The survey asked people why the practices they described were easy. They cited low cost, less work, no training needed, or if something already fit their plans. Some people said that their commitment to protect the environment made taking care of it easy.

18. Of all the things you learned to do at the workshop to protect Puget Sound, which is the hardest?	Response	Percent Response
Erosion control/drainage issues	12	
Convincing others to change	6	
Septic systems that don't pollute	3	
Nothing is too hard		
Total respondents		
Skipped this question		

18. Comments:

Open-ended question. Responses grouped as shown above. People were asked to describe why the practice stated was hard:

Some people responded that cost is an issue, especially for stormwater, erosion control, and septic systems.

I'd love to do a soft armor on my beach, looks beautiful and is good for the Sound, but for the same cost, I can send one of my grandkids to college./There are bulkheads on both sides of my property./Septic system is within 50 feet from the shoreline, but relocating it is costly and disruptive.

Time, work and lack of good alternatives is an issue for some people.

Composting instead of just throwing over the bank is a lot of work./No good alternatives to chemicals for some jobs./Hand weeding is hard.

Many people said that nothing was too hard.

Some Hood Canal and Birch Bay respondents saw sewage management as a big, costly problem that requires government support.

I'm exceedingly concerned about the initiative to bring sewer in on the North Shore of Hood Canal. There is certainly a need to get the sewer in, so why not bring it all the way down both shores? Stopping at Belfair is awful from our perspective./Requires interagency coordination and support to solve problems.

Some respondents said lack of government consensus and guidance for solutions made things hard.

So many solutions and too little direction for approved solutions/I want to put in a small dock and do it so that it has the least impact, but no one will tell me which designs, construction practices would do the least amount of harm./Getting permits to remove a salt water pool (shoreline restoration project).

Some people said that convincing others to be good stewards is the biggest challenge:

Ask neighbors to change their ways./Understanding why everyone doesn't see the need to stop polluting these waters./Convincing neighbors to get with the program.

19. Can you think of any other ways that the workshop influenced your actions or your future plans?

19. Comments: Open-ended question. 23 people responded/60 people skipped this question. Some responses follow:

I would've liked to have had a dock, but they made it sound like it's virtually impossible to permit./We had previously considered placing a solid bulkhead, but have decided to use more natural beach protection./Applied for landowner incentive grant for revegetation with native species./It made me aware that there are many different avenues to explore for solutions, and it provided some tips for finding additional information./I would be very interested in helping to take action in providing a sewer system along

North Shore Road to eliminate all septic systems./It made more aware of how fragile Hood Canal is./Plan on becoming more active in one or some of the Puget Sound action groups once I retire and have the time./Worked with county to get mutt mit stations; will talk with condo association./Removed invasive plants./I'd like at some point to meet with my neighbors and talk about shoreline stewardship.

20 - 23 Comments:

People who are not shoreline landowners answered questions 20 - 23. Shoreline landowners also answered these questions.

20. Did you share any of the information you learned in the workshop with family, friends, or neighbors?	Response	Percent Response
Yes	67	90.5%
No	7	9.5%
Total respondents	74	
Skipped this question	9	

20. Comments:

“No” respondents went on to question 21.

20a. What information did you share?

20a. Comments:

57 people answered this question/28 skipped it.

Several people shared handouts and resources from the workshop:

I created a folder of the information for all relatives and guests at our house to peruse; also forward e-mail alerts, etc./I shared all the handouts with my son-in-law who is a builder./I picked up 3 extra packets to share with my immediate shoreline neighbors./I share the availability of tech assistance in forming a neighborhood “pod”.

People also frequently shared information about vegetation and bluff stability, alternatives to bulkheads, and natural beach erosion control methods, septs, and alternatives to chemicals. A few people shared information about shoreline ecology (drift cells, eelgrass).

20b. Why did you share the information?

20b. Comments:

30 people answered this question/53 skipped it.

Most people shared information to influence the behavior of others and that group effort is needed to protect Puget Sound.

21. Have you participated in any activities to protect marine shorelines in your community?	Response	Percent Response
Yes	37	46.8%
No	42	53.2%
Total respondents	79	
Skipped this question	4	

21. Comments: “No” respondents went on to question 221.

21a. Please describe your participation.	Response	Percent Response
Critical Areas Ordinance	3	
Shoreline Master Plan	3	
Watershed group	3	
Salmon recovery planning	4	
Letters to editors	4	
Contacted public officials	7	
Testified at public hearings	3	
Volunteer work	22	
Other, please specify	8	
Total responses	57	
Total respondents	28	
Skipped this question	23	

21a. Comments:

People were able to give more than one answer. Other responses include:

Pressured county to manage stormwater on the development above homes and beach (2 people gave this answer)./Birch Bay steering committee focuses on shoreline protection./Involved with Spartina Watch./Installation of pet waste stations./Mainly getting educated on the CAO./Work with neighbors to bring logs onto the beach to control erosion./Attended events publicizing shoreline preservation./Manchester Community Council—I'm leading the committee to educate our community about environmental impacts (stormwater, car washing, fertilizing, etc.) through educational activities—salmon walk, etc./Meeting concerning development of a nature reserve park./Drayton Harbor Shellfish Protection Committee and Portage Bay Shellfish Protection Committee.

22. Have you become involved with shoreline restoration or preservation on either your own land, public land, or in your community?	Response	Percent Response
Yes	22	28.6%
No	55	71.4%
Total respondents	77	
Skipped this question	6	

22. Comments:

“No” respondents went on to question 23.

22a. Please briefly describe the project and your involvement with it.

22a. Comments:

17 people responded/66 people skipped this question.

Plant native oysters (2 people mentioned this)./Planning, zoning issues, beach survey./Routine clean- ups of beaches and community runoff areas./Managed growth on our own bank and beach./Member of board of directors association for pool removal in community park./Watershed Master volunteer, designed community posters for soft shore protection for Port of Bellingham, currently designing an interpretive sign on same subject./HCCC has offered to help us with suggestions and possible funding for plantings and restoration./I designed a beach and shoreline restoration plan for Matthews Beach Park for the Seattle Department of Parks and Recreation./Used drift logs to create a natural bulkhead./Work with Manchester Community Association to educate people about shoreline, salmon, recreational issues./Protection of Birch Bay heron colony; mutt mit stations./Coastal Zone Management grant volunteer to map beach; Nooksack salmon enhancement group volunteer./Condo spends \$25,000/yr on landscaping mostly grass—we need to switch to more natural landscape to avoid polluting the Sound and the aquifer./Wanted to do a beach enhancement project (more sediment) on Marrowstone Island, county quashed plans.

23. Please suggest ways the Puget Sound Action Team could improve the workshop to make it easier for people to protect Puget Sound.

23. Comments:

Open-ended. People were able to give more than one answer. 36 people responded/47 skipped this question.

Suggestions for improving workshop:

Hold more workshops on weekends or evenings./More Q & A periods interspersed through the day (2 recommended this)/Have it more often—we want to attend again (2 recommended this)/Breakout group sessions with technical assistance is more effective than long presentations./Shorter sessions on single topics held over a period of weeks or months./Present information in a less adversarial way, don't make people feel guilty.

Suggestions for reaching more people:

Try to reach part-timers, time-share owners, visitors, and boaters (3 people suggested this approach referencing one or more of these groups)/Don't restrict this information to just shoreline landowners—everyone needs to know this. (3 other people suggested this)/More notification before the workshop./Better promotion./Hold smaller, neighborhood specific workshops (2 people recommended this)/Most people are concerned about saving money—spread word about limitations of bulkheads./Reach people who own property before they build; hold the workshops in high risk slide areas.

Suggestions for topics to add to or emphasize in the workshop:

How to identify and get rid of invasive species in the Sound./Specific information on how to build a dock and other structures in the best way to protect the Sound (2 people mentioned this)/How to compost./Tell people not to develop wetland; not to dump yard waste in the Sound; geoduck harvest./More specialized help—attend with neighbors because these are problems that extend beyond property lines./Talk to people about the effects of septic systems and stormwater from new development in slide-prone areas/Convince people to hook up to sewers—septics are a big problem.

Suggestions for follow-up information, assistance, services:

Provide a central clearinghouse Web site with eco-friendly practices and regulatory information. (1 other person recommended a central place for regulatory information on the Web)/Packets for real estate agents to give out (suggested by a realtor that attended the workshop because she lived on the Sound and wanted to pass the information on to clients)/Information to give to new people in the community/ More written materials available at Birch Bay businesses for visitors; speak to condo associations on waterfront./Neighbor to neighbor education and incentives/PSAT should hold a public meeting on Hood Canal for all shoreline

communities—present findings and proposed actions to correct low dissolved oxygen levels./Assign workshop coordinators to provide assistance and answer questions for people after the workshop./Continue to be accessible via e-mail and phone and offer brochures, ideas, and custom solutions to address the health of our Puget Sound—thank you for all that you’ve done so far! /Develop consensus among the various governing agencies on the solutions available for shoreline landowners for environmental concerns—most will be willing to do the right thing if there were well thought out solutions and consensus by the various governing bodies on what that is—especially for stormwater./Retain an engineer and systems designer to provide site visits and advice for shoreline landowners./Provide advice and funds to help people with problems.

References:

Taylor, K., Culverwell, H., Cambalik, J., Educating Shoreline Landowners: Examples from King, Whatcom, Kitsap, Jefferson, Mason, and Pierce counties, A Perspective on Approaches and Effectiveness in Eliciting On-the-Ground Change. Proceedings for the Puget Sound-Georgia Basin Research Conference, March 2005, PSAT.